JUSTIFICATION AND APPROVAL
FOR AN EXCEPTION TO FAIR OPPORTUNITY

1. <u>Contracting Activity</u>: Department of Veterans Affairs (VA)
        Office of Acquisition Operations (OAO)
        Technology Acquisition Center
        260 Industrial Way West
        Eatontown, NJ 07724

2. <u>Description of Action</u>: This proposed action is for a Firm Fixed-Price Delivery Order (DO) issued under a National Aeronautics and Space Administration (NASA) Solutions for Enterprise-Wide Procurement (SEWP) IV Government-Wide Acquisition Contract (GWAC) for brand name International Business Machines (IBM) ILOG/Operational Decision Management (ODM) software licenses and maintenance support for the aforementioned software licenses. The period of performance is a one-year base with four, one-year option periods.

3. <u>Description of the Supplies or Services</u>: The proposed action is for IBM ILOG/ODM software licenses and maintenance support. The IBM ILOG/ODM software licenses provide underlying core business rule identification functionality and storage capabilities crucial to the continued development and sustainment of VA's software architecture. A business rule is a stated operational requirement of a behavior or action to be programmed into a software product, discussed from the point of view of the business process' owner. It is a definition of decision logic that describes what the software should do given a set of events, conditions, possible variables, constant values, in order to return an expected output result or to make a decision where a decision branch must be taken. IBM ILOG/ODM software makes VA software applications compliant with the VA Enterprise Architecture by isolating business process rules embedded in the software so that the business processes can be recorded, maintained, implemented, and accessible in a separate repository. There is one production copy of the repository of business rules for each VA application using the software. Each application has additional business rules repositories defined for each development and testing environment used during product design. They are managed and maintained by the product development team each time the execution of the software and the business office functional requirements are updated to reflect new or changed software execution requirements. This repository is accessible to the application during development, testing and production use and resides in the same environments as the application's development, testing and production implementation. This middle layer of the application is recoverable and reusable if the VA application's primary database and user application software technologies change. It allows independence and management of the programming logic of the application software from the physical application database technology chosen and the physical user application technology chosen (web application, mobile application, full desktop client application, applications written in multiple programming languages, etc.) Maintenance and licensing support is required to ensure the aforementioned software licenses remain operational. This maintenance support includes software maintenance and telephone/web support for

24x7 support and updates. The total estimated value of this proposed action, inclusive of the option periods, is ████████████

4. <u>Statutory Authority</u>: The statutory authority permitting an exception to fair opportunity is Section 41 U.S.C. 4106(c) as implemented by the Federal Acquisition Regulation (FAR) Subpart 16.505(b)(2)(i)(B), entitled "Only one awardee is capable of providing the supplies or services required at the level of quality required because the supplies or services ordered are unique or highly specialized."

5. <u>Rationale Supporting Use of Authority Cited Above</u>: Based on market research, as described in paragraph 8 below, it has been determined that limited competition is viable among authorized resellers for this brand name item and services. This is a brand name justification in support of FAR 11.105, Items Particular to One Manufacturer. IBM ILOG/ODM software is the only software that can continue to build upon VA's existing IBM ILOG-based systems and their proprietary data repositories that contain business process rules. This software creates a unique data repository within each VA-built software application dependent upon business rules management capability. The repository is used in real time by the VA application in order to execute the application. Compatibility to existing proprietary repositories, which are called upon on demand during execution of critical VA applications, is required. No other brand name item is compatibile or interoperable with the existing repositories. This is because all of the existing repositories that store various business process rules were created through IBM proprietary technical data and can only be accessible and functional through brand name IBM software. Acquiring a different business rules management tool other than the IBM ILOG/ODM software would require extensive re-engineering of existing repositories as well as VA application interfaces to the repositories, the development and requirements management processes for managing the repositories, and the role-based access to the tools. Re-engineering of existing repositories and repositories to be changed as would be a major revision to a critical application. Planning for a reengineering of all products using the business rules software would require the products to set aside all mandated functional improvements and expansions in order to dedicate the next 1-2 years to replacing the business rules engine and repository used. Elimination of these repositories and discontinuing of the use of the IBM ILOG/ODM software would require major reengineering efforts that would seriously jeopardize VA's architecture and required deliveries of new functionality and system improvements for multiple high profile, high risk, and high budget program initiatives such as such as Veterans Benefits Management System (VBMS), Patient Enrollment System Replacement (ESR), Rules Based Processing System (RBPS), Benefits Enrollment Platform (BEP), Health Acquisition Center (HAC), Memorials Services, Financial Services Center, Veterans Benefits Handbooks, Chapter 33, and others in health, benefits, and corporate business lines.

6. <u>Efforts to Obtain Competition</u>: Market research was conducted, details of which are in the market research section of this document. This effort did not yield any additional sources that can meet the Government's requirements to sustain these repositories without completely overhauling their structure and their definitions in the database and their availability to the production VA applications. It was determined however that limited competition is viable among authorized resellers for this IBM brand name software and maintenance services. In accordance with FAR 5.301 and 16.505(b)(2), this action will be synopsized at award on the Federal Business Opportunities Page (FBO) and the justification will be made publicly available.

7. <u>Actions to Increase Competition</u>: The Government will continue to conduct market research to ascertain if there are changes in the market place that would enable future actions to be competed.

8. <u>Market Research</u>: The Government's technical expert conducted market research by reviewing similar software, maintenance, and support. This market research is an ongoing process that started in 2007 and is being conducted continuously, as recently as May 6, 2013. Specifically, the Government's technical experts reviewed software and support from Drools, Red Hat JBOSS, and InRule and determined that none of these brands provided the ability to process business rules from the existing repositories, and found that these other products individually introduced other constraints in their business rule development process that limits VA's ability to substitute the product for our existing solution. Specifically, the rules creation technologies of each potential replacement product analyzed did not support all the existing platforms in use in VA. InRule is written in Microsoft .NET and has strong integration with Microsoft technologies and environments. However, it has been solely associated to Microsoft technologies and was not found to support non-Microsoft programming solutions. Red Hat JBOSS introduces a new business rules engine as well as a new business process management solution dependent significantly upon Drools. This migration would include a need to deconstruct and reengineer the business rules, which use a very different framework. Drools proprietary rules creation scripting and authoring language did not provide a complete language/lexicon that would allow our rules to be re-entered in a new repository when using the new tool's user interface. Additionally, none of the products can provide connectivity or recognition of existing interfaces to the existing repository. Software architecture that employs a business rules engine is essential to establish the integration between a Business Process Management and a Business Rules Management platform that is based upon processes responding to events or examining business judgments that are defined by business rules. Compatibility and compliance to both the application database-to-business rules interface and the business rules-to-user interface application must be maintained to use a repository-driven business rules middle tier. Other manufacturers' product solutions would require a significant effort for migration and must be scheduled as a reengineering effort for each project.

9. <u>Other Facts</u>: Additional market research was conducting by utilizing the Product Verification Tool on the NASA SEWP IV website on May 31, 2013. This search resulted in 11 resellers of the required IBM maintenance including Affigent (Group C Small Business Value Added Reseller (VAR), Blue Tech (Group C Small Business VAR), CounterTrade (Group C Small Business VAR), FedStore (Group B Service-Disabled Veteran-Owned Small Business(SDVOSB) Value Added Reseller (VAR)), GC Micro (Group C Small Business VAR), Merlin (Group C Small Business VAR), and Sword and Shield (Group C Small Business VAR).